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30. (Amended) The photovoltaic element according to Claim 27,  
wherein the concentration of the silane coupling agent is higher at a location in the  
encapsulant resin near the surface member.

31. (Amended) The photovoltaic element according to Claim 27,  
wherein the concentration of the silane coupling agent is higher at a location near the  
photovoltaic element.

#### REMARKS

Claims 14, 27, 28, 30 and 31 are now pending in this application. Claims  
14, 30 and 31 have been amended to define still more clearly what Applicants regard as  
their invention. Claim 14 is independent. Claim 29 has been cancelled without prejudice.

Claims 14 and 27-31 were rejected under 35 U.S.C. § 103(a) as being  
obvious from U.S. Patent 5,530,264 (Kataoka et al.) in view of U.S. Patent 5,641,997  
(Ohta et al.). Independent Claim 14 is believed patentable for at least the following  
reasons:

Independent Claim 14 is directed to a photovoltaic element encapsulated in  
a stack structure with an encapsulant resin and a surface member in an order of the  
photoelectric element, the encapsulant resin and the surface member. The encapsulant  
resin comprising a hot-melt polymer resin comprising an ultraviolet absorbing agent  
dissolved therein. The dissolved ultraviolet absorbing agent has a concentration gradient in

the direction of thickness of the encapsulant resin. The concentration of the ultraviolet absorbing agent is higher at a location near a light incident surface of the encapsulant resin.

Kataoka teaches a photoelectric conversion device. While Kataoka shows incorporating an ultraviolet absorbing agent in an encapsulant resin, it has to teaching or suggestion of providing a concentration gradient thereto, still less making its concentration higher at a light incident surface side, as in Claim 14.

On the other, an important feature of the invention defined by independent Claim 14 is that by providing an additive, i.e., ultraviolet absorbing agent, in an encapsulant resin with a concentration gradient, the amount of use of the additive is reduced to a minimum, and a volatile component of the additive generated when melting the encapsulate resin in the lamination step is reduced to suppress generation of bubbles (see the specification at page 7, lines 19-26). Therefore, if the ultraviolet absorbing agent is distributed uniformly in the encapsulant resin, the amount of ultraviolet absorbing agent used will become excessive, so that the key advantage of the present invention will not be attained. Accordingly, simply incorporating the additive, as taught in Kataoka, will not achieve the advantages discussed above.

Ohta relates to a plastic-encapsulated *semiconductor* device in which a semiconductor chip is positioned between encapsulating sheets, which each have a surface that is highly adhesive, and one that is less so. Ohta shows no recognition of the aforementioned problems of generation of bubbles that may result from the additive during the melting of the encapsulant nor of the use of an ultraviolet absorbing agent. Applicants submit that the combination of Kataoka and Ohta fails to teach or suggest all of the features

of amended Claim 14. Accordingly, Claim 14 is believed allowable over any combination of those two patents.

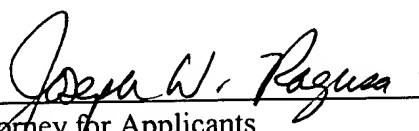
A review of the other art of record has failed to reveal anything which, in Applicants' opinion, would remedy the deficiencies of the art discussed above, as references against the independent claims herein. Those claims are therefore believed patentable over the art of record.

The other claims in this application are each dependent from independent Claim 14, discussed above, and are therefore believed patentable for the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, however, the individual reconsideration of the patentability of each on its own merits is respectfully requested.

In view of the foregoing amendments and remarks, Applicants respectfully request favorable reconsideration and early passage to issue of the present application.

Applicants' undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our below listed address.

Respectfully submitted,

  
Attorney for Applicants  
Registration No. 38,586

FITZPATRICK, CELLA, HARPER & SCINTO  
30 Rockefeller Plaza  
New York, New York 10112-3801  
Facsimile: (212) 218-2200

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MARKED-UP VERSION MARKED TO SHOW CHANGES TO THE CLAIMS

Claims 14, 30 and 31 have been amended as follows:

14. (Three Times Amended) A photovoltaic element encapsulated in a stack structure with an encapsulant resin and a surface member in an order of the photoelectric element, the encapsulant resin and the surface member, the encapsulant resin comprising a hot-melt polymer resin comprising an ultraviolet absorbing agent dissolved therein, wherein the dissolved ultraviolet absorbing agent has a concentration gradient in the direction of thickness of the encapsulant resin,

wherein the concentration of the ultraviolet absorbing agent is higher at a location near a light incident surface of the encapsulant resin.

26. (Cancelled).

30. (Amended) The photovoltaic element according to Claim [29] 27, wherein the concentration of the silane coupling agent is higher at a location in the encapsulant resin near the surface member.

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31. (Amended) The photovoltaic element according to Claim [29] 27,  
wherein the concentration of the silane coupling agent is higher at a location near the  
photovoltaic element.

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